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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/781,098	02/17/2004	Brian D. Cull	H0005630--1611	3371
128	7590	07/27/2005	EXAMINER	
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			CHOI, JACOB Y	
			ART UNIT	PAPER NUMBER
			2875	

DATE MAILED: 07/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary

Application No.

10/781,098

Applicant(s)

CULL ET AL.

Examiner

Jacob Y. Choi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the fluorescent lamp has a first side facing a display must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an

application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 15 is objected to because of the following informalities: the term "lest" requires an appropriate correction.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

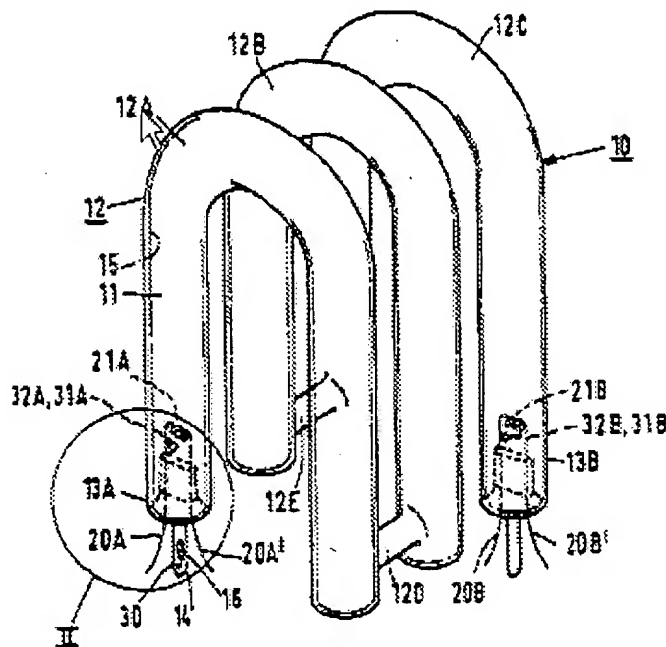
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-3, 5, 7, 8, 11-14, 23-30, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Den Breeijen et al. (USPN 5,719,465).

Regarding claims 1-3, 5, 7, 8, 11-14, 23-30, and 38, Den Breeijen et al. discloses a plurality of interdigitated/interlocked legs connected by a plurality of curved segments (12A), the plurality of interdigitated legs arranged in multiple planes (Figure shown

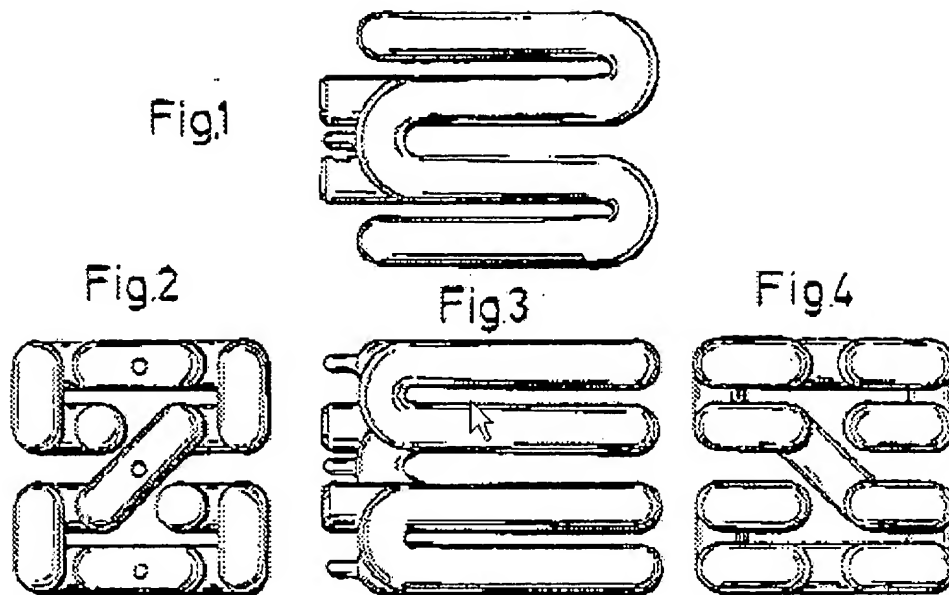
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below), the fluorescent lamp comprises a tubular fluorescent lamp (10), the plurality of interdigitated legs are substantially parallel, the plurality of interdigitated legs are arranged such that successive legs alternate between planes (12A, 12B, 12C), the multiple planes comprises a first curved plane and a second curved plane (curved portions), the each of plurality of legs includes an aperture (spaces between the legs), at least one of the plurality of legs has a scalloped cross sectional shape, at least one of the plurality of legs has a cross sectional diameter that varies (12D) along a length of the leg, at least one of the plurality of legs has a plurality of undulation (12E), at least two of the plurality of legs have a plurality of undulations, and wherein the undulations of the at least two legs are shaped to mesh together (shown in Figure below), a first and second cathode (II) at a first and second end on the tubular fluorescent lamp.



6. Claims 1-3, 5-8, 10-13, and 15-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Foo (Des. 413,398).

Regarding claims 1-3, 5-8, 10-13, and 15-38, Foo discloses a plurality of interdigitated legs connected by a plurality of curved segments, the plurality of interdigitated legs arranged in multiple planes (e.g., Figure 4), the fluorescent lamp comprises a tubular fluorescent lamp (claim; "*the ornamental design for a fluorescent tube, as shown and described*"), the plurality of interdigitated legs are **substantially** parallel (e.g., Figures 1, 3, and 4), the plurality of legs comprises at least three adjacent legs in a first plane (e.g., Figures 2 and 4), at least three adjacent legs in a second plane, and a curved segment between a leg in the first plane and a leg in the second plane, the multiple planes comprise a first curved plane and a second curved plane, the each of plurality of legs includes an aperture (gap between the two legs), at least one of the plurality of legs has an elliptical cross sectional shape (e.g., Figure 2), at least one of the plurality of legs has scalloped cross sectional shape (e.g., Figure 2), at least one of the plurality of legs has a cross sectional diameter that varies along a length of the leg (e.g., Figures 1 and 3; especially at the very tip end of the leg), and at least one of the plurality of legs has a plurality of undulations (e.g., Figures 1 and 3; especially at the very tip end of the leg), a first and second cathode is located at the beginning and end of the elongated and variously shaped tubular fluorescent lamp.

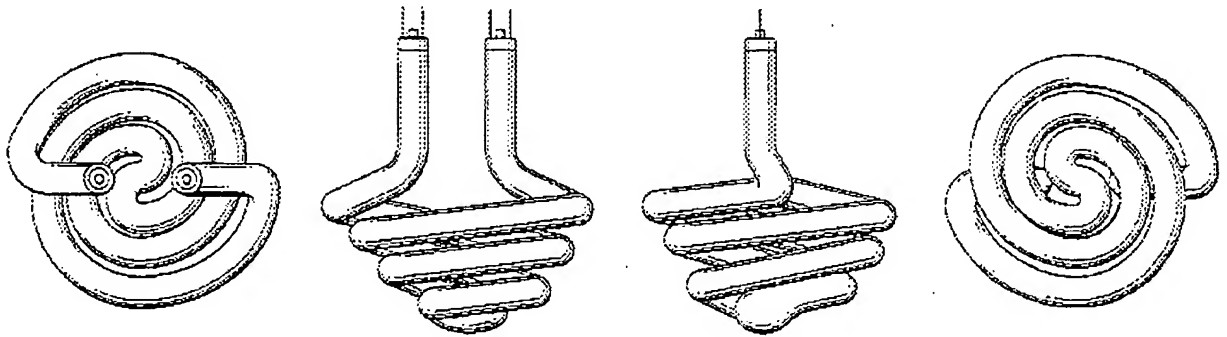


7. Claims 1-5, 7-8, 10-14, and 15-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Li (US D488,874).

Regarding claims 1-5, 7-8, 10-14, and 15-38, Li discloses a plurality of interdigitated legs connected by a plurality of curved segments, the plurality of interdigitated legs arranged in multiple planes (e.g., Figures 1 and 2), the fluorescent lamp comprises a tubular fluorescent lamp (Claim; "*the ornamental design of a compact fluorescent lamp glass tube*"), the plurality of interdigitated legs are **substantially** parallel (e.g., Figures 1 and 2), the plurality of interdigitated legs are arranged in spiral (e.g., Figure 3 and 4), the plurality of interdigitated legs are arranged such that successive legs alternate between planes, the multiple planes comprise a first curved plane and a second curved plane, the each of plurality of legs includes an aperture (gap between the legs), at least one of the plurality of legs has an elliptical cross sectional shape, at least one of the plurality of legs has a scalloped cross sectional shape (far

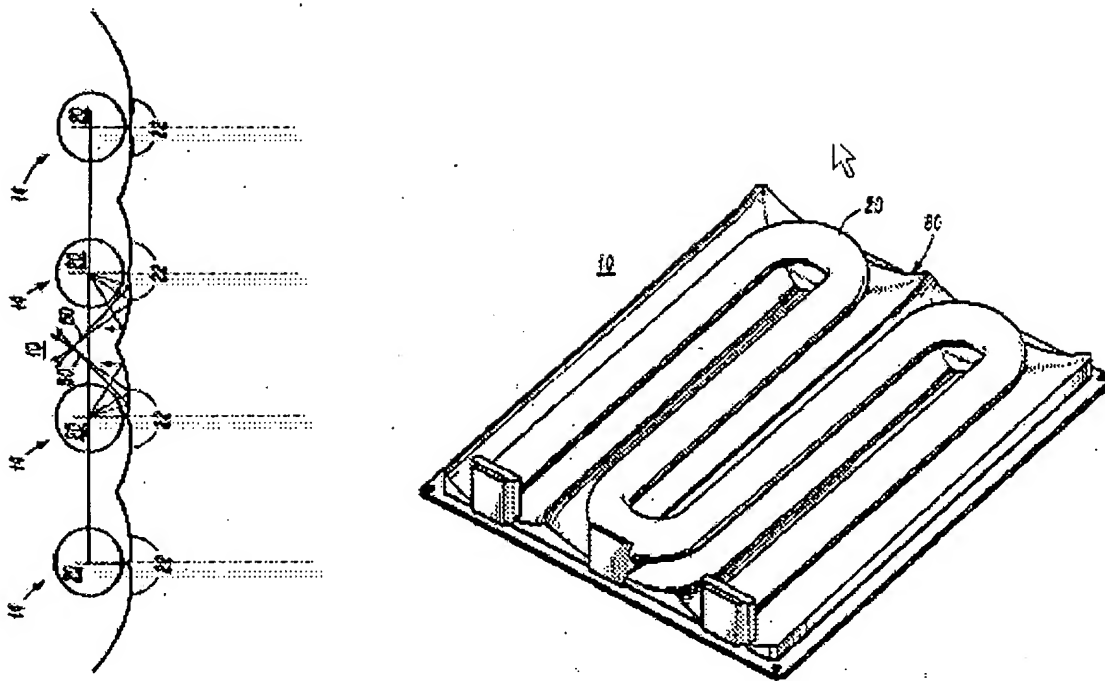
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end of the legs), at least one of the plurality of legs has a cross sectional diameter that varies along a length of the legs, at least one of the plurality of legs has a plurality of undulations, at least two of the plurality of legs have a plurality of undulations, and wherein the undulations of the at least two legs are shaped to mesh together (far end of the legs, e.g., Figures 3 and 4), a first and second cathode is located at the beginning and end of the elongated and variously shaped tubular fluorescent lamp.



8. Claims 1, 2, 3, 8, 9, 11 and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by Mephram et al. (USPN 5,253,151).

Regarding claims 1, 2, 3, 8, 9, 11 and 38, Mephram et al. discloses a plurality of interdigitated legs connected by a plurality of curved segments, the plurality of interdigitated legs are substantially parallel, the each of plurality of legs includes an aperture, the at least one of the plurality of legs has a scalloped cross sectional shape, the plurality of interdigitated legs arranged in multiple planes, the fluorescent lamp has a first side facing a display, and wherein the plurality of legs are interdigitated to provide a continuous lamp surface on the first side (back lighting for LCD).



Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Foo (US D480,161) – fluorescent tube

Foo (US D473,329) - fluorescent tube

Foo (US D463,870) - fluorescent tube

Foo (US D438,652) - fluorescent tube

Foo (Des. 406,908) – 4u fluorescent tube

Foo (Des. 390,674) – fluorescent tube

Bobel (US D471,296) – fluorescent lamp glass tube bending shape

Bobel (US D471,272) – fluorescent lamp glass tube shape

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Bobel (US D471,298) – fluorescent lamp glass tube bending shape

Yang (Des. 349,969) - fluorescent tube

Kamei et al. (Des. 304,241) - fluorescent lamp tube

Choi (Des. 432,687) – compact fluorescent tube

Misono et al. (Des. 303,157) - fluorescent lamp tube

Soo (Des. 410,555) fluorescent tube

Bankuti et al. (USPN 5,801,484) – compact fluorescent lamp discharge tube and method for closing

Biro et al. (USPN 5,739,633) – amalgam containing compact fluorescent lamp with improved warm up


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC



JOHN ANTHONY WARD
PRIMARY EXAMINER